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Compositionally Different Polymer-Based Sensor Elements And Methods For Preparing Same Abstract

The present invention provides a combinatorial approach

for preparing arrays of chemically sensitive polymer-based
sensors which are capable of detecting the presence of a
chemical analyte in a fluid in contact therewith. The
described methods and devices comprise combining varying
ratios of at least first and second organic materials which,
when combined, form a polymer or polymer blend that is
capable of absorbing a chemical analyte, thereby providing a
detectable response. The detectable response of the sensors
prepared by this method is not linearly related to the mole
fraction of at least one of the polymer-based components of

the sensors, thereby making arrays of these sensors useful for a variety of sensing tasks.

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